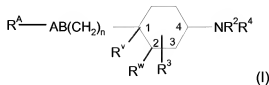


Amendments to the claims

Listing of claims:

1-15. Canceled.

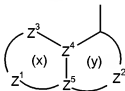
16. (Currently amended) A compound of formula (I) or a pharmaceutically acceptable derivative salt and/or N-oxide thereof:



wherein:

R^V and R^W are hydrogen or R^V and R^W together are a bond;

R^A is an optionally substituted bicyclic carbocyclic or heterocyclic ring system of structure:



containing 0-3 heteroatoms in each ring in which:

at least one of rings (x) and (y) is aromatic;

one of Z^4 and Z^5 is C or N and the other is C;

Z^3 is N, NR^{13} , O, $S(O)_x$, CO, CR^1 or CR^1R^{1a} ;

Z^1 and Z^2 are independantly a 2 or 3 atom linker group each atom of which is independently selected from N, NR^{13} , O, $S(O)_x$, CO, CR^1 and CR^1R^{1a} ;
such that each ring is independently substituted with 0-3 groups R^1 and/or R^{1a} ;

R^1 and R^{1a} are independently selected from hydrogen; hydroxy; (C₁₋₆) alkoxy optionally substituted by (C₁₋₆)alkoxy, amino, piperidyl, guanidino or amidino any of which is optionally N-substituted by one or two (C₁₋₆)alkyl, acyl or (C₁₋₆)alkylsulphonyl groups, CONH₂, hydroxy, (C₁₋₆)alkylthio, heterocyclythio, heterocyclyloxy, arylthio, aryloxy, acylthio, acyloxy or (C₁₋₆)alkylsulphonyloxy; (C₁₋₆)alkoxy-substituted (C₁₋₆)alkyl; hydroxy (C₁₋₆)alkyl; halogen; (C₁₋₆)alkyl; (C₁₋₆)alkylthio; trifluoromethyl; trifluoromethoxy; cyano; carboxy; nitro; azido; acyl; acyloxy; acylthio; (C₁₋₆)alkylsulphonyl; (C₁₋₆)alkylsulphoxide; arylsulphonyl; arylsulphoxide or

an amino, piperidyl, guanidino or amidino group optionally N-substituted by one or two (C₁₋₆)alkyl, acyl or (C₁₋₆)alkylsulphonyl groups, or when Z³ and the adjacent atom are CR¹ and CR^{1a}, R¹ and R^{1a} may together represent (C₁₋₂)alkylenedioxy, provided that R¹ and R^{1a}, on the same carbon atom are not both optionally substituted hydroxy or amino;

provided that

(i) when R^A is optionally substituted quinolin-4-yl:

it is unsubstituted in the 6-position; or

it is substituted by at least one hydroxy (C₁₋₆)alkyl, cyano or carboxy group at the 2-, 5-, 6-, 7- or 8-position; or

it is substituted by at least one trifluoromethoxy group; or

R³ is halogen;

(ii) when R^A is optionally substituted quinazolin-4-yl, cinnolin-4-yl, 1,5-naphthyridin-4-yl, 1,7-naphthyridin-4-yl or 1,8-naphthyridin-4-yl:

it is substituted by at least one hydroxy (C₁₋₆)alkyl, cyano or carboxy group at the 2-, 5-, 6-, 7- or 8-position as available; or

it is substituted by at least one trifluoromethoxy group; or

R³ is halogen;

R² is hydrogen, or (C₁₋₄)alkyl or (C₂₋₄)alkenyl optionally substituted with 1 to 3 groups selected from:

amino optionally substituted by one or two (C₁₋₄)alkyl groups; carboxy; (C₁₋₄)alkoxycarbonyl; (C₁₋₄)alkylcarbonyl; (C₂₋₄)alkenyloxy carbonyl; (C₂₋₄)alkenylcarbonyl; aminocarbonyl wherein the amino group is optionally substituted by hydroxy, (C₁₋₄)alkyl, hydroxy(C₁₋₄)alkyl, aminocarbonyl(C₁₋₄)alkyl, (C₂₋₄)alkenyl, (C₁₋₄)alkylsulphonyl, trifluoromethylsulphonyl, (C₂₋₄)alkenylsulphonyl, (C₁₋₄)alkoxycarbonyl, (C₁₋₄)alkylcarbonyl, (C₂₋₄)alkenyloxy carbonyl or (C₂₋₄)alkenylcarbonyl; cyano; tetrazolyl; 2-oxo-oxazolidinyl optionally substituted by R¹⁰; 3-hydroxy-3-cyclobutene-1,2-dione-4-yl; 2,4-thiazolidinedione-5-yl; tetrazol-5-ylaminocarbonyl; 1,2,4-triazol-5-yl optionally substituted by R¹⁰; 5-oxo-1,2,4-oxadiazol-3-yl; halogen; (C₁₋₄)alkylthio; trifluoromethyl; hydroxy optionally substituted by (C₁₋₄)alkyl, (C₂₋₄)alkenyl, (C₁₋₄)alkoxycarbonyl, (C₁₋₄)alkylcarbonyl, (C₂₋₄)alkenyloxy carbonyl, (C₂₋₄)alkenylcarbonyl; oxo; (C₁₋₄)alkylsulphonyl; (C₂₋₄)alkenylsulphonyl; or (C₁₋₄)aminosulphonyl wherein the amino group is optionally substituted by (C₁₋₄)alkyl or (C₂₋₄)alkenyl;

R³ is hydrogen; or

when R^V and R^W are a bond, R^3 is in the 2-, 3- or 4- position and when R^V and R^W are not a bond, R^3 is in the 1-, 2-, 3- or 4-position and R^3 is:

carboxy; (C₁₋₆)alkoxycarbonyl; aminocarbonyl wherein the amino group is optionally substituted by hydroxy, (C₁₋₆)alkyl, hydroxy(C₁₋₆)alkyl, aminocarbonyl(C₁₋₆)alkyl, (C₂₋₆)alkenyl, (C₁₋₆)alkylsulphonyl, trifluoromethylsulphonyl, (C₂₋₆)alkenylsulphonyl, (C₁₋₆)alkoxycarbonyl, (C₁₋₆)alkylcarbonyl, (C₂₋₆)alkenylloxycarbonyl or (C₂₋₆)alkenylcarbonyl and optionally further substituted by (C₁₋₆)alkyl, hydroxy(C₁₋₆)alkyl, aminocarbonyl(C₁₋₆)alkyl or (C₂₋₆)alkenyl; cyano; tetrazolyl; 2-oxo-oxazolidinyl optionally substituted by R^{10} ; 3-hydroxy-3-cyclobutene-1,2-dione-4-yl; 2,4-thiazolidinedione-5-yl; tetrazol-5-ylaminocarbonyl; 1,2,4-triazol-5-yl optionally substituted by R^{10} ; or 5-oxo-1,2,4-oxadiazol-3-yl; or

(C₁₋₄)alkyl or ethenyl optionally substituted with any of the groups listed above for R^3 and/or 0 to 2 groups R^{12} independently selected from:

halogen; (C₁₋₆)alkylthio; trifluoromethyl; (C₁₋₆)alkoxycarbonyl; (C₁₋₆)alkylcarbonyl; (C₂₋₆)alkenylloxycarbonyl; (C₂₋₆)alkenylcarbonyl; hydroxy optionally substituted by (C₁₋₆)alkyl, (C₂₋₆)alkenyl, (C₁₋₆)alkoxycarbonyl, (C₁₋₆)alkylcarbonyl, (C₂₋₆)alkenylloxycarbonyl, (C₂₋₆)alkenylcarbonyl or aminocarbonyl wherein the amino group is optionally substituted by (C₁₋₆)alkyl, (C₂₋₆)alkenyl, (C₁₋₆)alkylcarbonyl or (C₂₋₆)alkenylcarbonyl; amino optionally mono- or disubstituted by (C₁₋₆)alkoxycarbonyl, (C₁₋₆)alkylcarbonyl, (C₂₋₆)alkenylloxycarbonyl, (C₂₋₆)alkenylcarbonyl, (C₁₋₆)alkyl, (C₂₋₆)alkenyl, (C₁₋₆)alkylsulphonyl, (C₂₋₆)alkenylsulphonyl or aminocarbonyl wherein the amino group is optionally substituted by (C₁₋₆)alkyl or (C₂₋₆)alkenyl; aminocarbonyl wherein the amino group is optionally substituted by (C₁₋₆)alkyl, hydroxy(C₁₋₆)alkyl, aminocarbonyl(C₁₋₆)alkyl, (C₂₋₆)alkenyl, (C₁₋₆)alkoxycarbonyl, (C₁₋₆)alkylcarbonyl, (C₂₋₆)alkenylloxycarbonyl or (C₂₋₆)alkenylcarbonyl and optionally further substituted by (C₁₋₆)alkyl, hydroxy(C₁₋₆)alkyl, aminocarbonyl(C₁₋₆)alkyl or (C₂₋₆)alkenyl; oxo; (C₁₋₆)alkylsulphonyl; (C₂₋₆)alkenylsulphonyl; or (C₁₋₆)aminosulphonyl wherein the amino group is optionally substituted by (C₁₋₆)alkyl or (C₂₋₆)alkenyl; or

hydroxy optionally substituted by (C₁₋₆)alkyl, (C₂₋₆)alkenyl, (C₁₋₆)alkoxycarbonyl, (C₁₋₆)alkylcarbonyl, (C₂₋₆)alkenylloxycarbonyl, (C₂₋₆)alkenylcarbonyl or aminocarbonyl wherein the amino group is optionally substituted by (C₁₋₆)alkyl, (C₂₋₆)alkenyl, (C₁₋₆)alkylcarbonyl or (C₂₋₆)alkenylcarbonyl; or

amino optionally mono- or disubstituted by (C₁₋₆)alkoxycarbonyl, (C₁₋₆)alkylcarbonyl, (C₂₋₆)alkenylloxycarbonyl, (C₂₋₆)alkenylcarbonyl, (C₁₋₆)alkyl, (C₂₋₆)alkenyl, (C₁₋₆)alkylsulphonyl,

(C₂₋₆)alkenylsulphonyl or aminocarbonyl wherein the amino group is optionally substituted by (C₁₋₆)alkyl or (C₂₋₆)alkenyl; or

halogen;

provided that when R³ is in the 4- position it is not optionally substituted hydroxyl or amino or halogen;

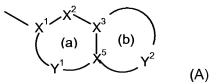
in addition when R³ is disubstituted with a hydroxy or amino containing substituent and a carboxy containing substituent these may optionally together form a cyclic ester or amide linkage, respectively;

R¹⁰ is selected from (C₁₋₄)alkyl and (C₂₋₄)alkenyl either of which may be optionally substituted by a group R¹² as defined above; carboxy; aminocarbonyl wherein the amino group is optionally substituted by hydroxy, (C₁₋₆)alkyl, (C₂₋₆)alkenyl, (C₁₋₆)alkylsulphonyl, trifluoromethylsulphonyl, (C₂₋₆)alkenylsulphonyl, (C₁₋₆)alkoxycarbonyl, (C₁₋₆)alkylcarbonyl, (C₂₋₆)alkenyloxycarbonyl or (C₂₋₆)alkenylcarbonyl and optionally further substituted by (C₁₋₆)alkyl or (C₂₋₆)alkenyl; (C₁₋₆)alkylsulphonyl; trifluoromethylsulphonyl; (C₂₋₆)alkenylsulphonyl; (C₁₋₆)alkoxycarbonyl; (C₁₋₆)alkylcarbonyl; (C₂₋₆)alkenyloxycarbonyl; and (C₂₋₆)alkenylcarbonyl;

R⁴ is a group -CH₂-R⁵₄ in which R⁵₄ is selected from:

—(C₄₋₈)alkyl; hydroxy(C₄₋₈)alkyl; (C₁₋₄)alkoxy(C₄₋₈)alkyl; (C₁₋₄)alkanoyloxy(C₄₋₈)alkyl; (C₃₋₈)cycloalkyl(C₄₋₈)alkyl; hydroxy-, (C₁₋₆)alkoxy- or (C₁₋₆)alkanoyloxy-(C₃₋₈)cycloalkyl(C₄₋₈)alkyl; cyano(C₄₋₈)alkyl; (C₄₋₈)alkenyl; (C₄₋₈)alkynyl; tetrahydrofuryl; mono- or di-(C₁₋₆)alkylamino(C₄₋₈)alkyl; acylamino(C₄₋₈)alkyl; (C₁₋₆)alkyl- or acyl-aminocarbonyl(C₄₋₈)alkyl; mono- or di-(C₁₋₆)alkylamino(hydroxy)(C₄₋₈)alkyl; or

R⁴ is a group -U-R⁵₂ where R⁵₂ is an optionally substituted bicyclic ~~carbocyclic~~ or heterocyclic ring system (A):



containing up to four heteroatoms in each ring in which ring (a) is aromatic and ring (b) is non-aromatic;

at least one of rings (a) and (b) is aromatic;

X^1 is C or N when part of an aromatic ring or CR^{14} when part of a non-aromatic ring;

X^2 is N, NR^{13} , O, $S(O)_x$, CO or CR^{14} when part of an aromatic or non-aromatic ring or may in addition be $CR^{14}R^{15}$ when part of a non-aromatic ring;

X^3 and X^5 are independently N or C;

Y^1 is a $[0 \text{ to } 4]$ 2 atom linker group having N bonded to X^1 and CR^{14} bonded to said N and to X^5 , each atom of which is independently selected from N, NR^{13} , O, $S(O)_x$, CO and CR^{14} when part of an aromatic or non-aromatic ring or may additionally be $CR^{14}R^{15}$ when part of a non-aromatic ring;

Y^2 is a 2 to 6 4 atom linker group, having O bonded to X^3 , O bonded to X^5 , and in which the other atoms are $CR^{14}R^{15}$, each atom of Y^2 being independently selected from N, NR^{13} , O, $S(O)_x$, CO and CR^{14} when part of an aromatic or non-aromatic ring or may additionally be $CR^{14}R^{15}$ when part of a non-aromatic ring;

each of R^{14} and R^{15} is independently selected from: H; (C_{1-4}) alkylthio; halo; carboxy (C_{1-4}) alkyl; halo (C_{1-4}) alkoxy; halo (C_{1-4}) alkyl; (C_{1-4}) alkyl; (C_{2-4}) alkenyl; (C_{1-4}) alkoxycarbonyl; formyl; (C_{1-4}) alkylcarbonyl; (C_{2-4}) alkenyloxy; (C_{2-4}) alkenylcarbonyl; (C_{1-4}) alkylcarbonyloxy; (C_{1-4}) alkoxycarbonyl (C_{1-4}) alkyl; hydroxy; hydroxy (C_{1-4}) alkyl; mercapto (C_{1-4}) alkyl; (C_{1-4}) alkoxy; nitro; cyano; carboxy; amino or aminocarbonyl optionally substituted as for corresponding substituents in R^3 ; (C_{1-4}) alkylsulphonyl; (C_{2-4}) alkenylsulphonyl; or aminosulphonyl wherein the amino group is optionally substituted by (C_{1-4}) alkyl or (C_{2-4}) alkenyl; aryl; aryl (C_{1-4}) alkyl; aryl (C_{1-4}) alkoxy;

each R^{13} is independently H; trifluoromethyl; (C_{1-4}) alkyl optionally substituted by hydroxy, carboxy, (C_{1-6}) alkoxycarbonyl, (C_{1-6}) alkoxy, (C_{1-6}) alkylthio, halo or trifluoromethyl; (C_{2-4}) alkenyl; aryl; aryl (C_{1-4}) alkyl; arylcarbonyl; heteroarylcarbonyl; (C_{1-4}) alkoxycarbonyl; (C_{1-4}) alkylcarbonyl; formyl; (C_{1-6}) alkylsulphonyl; or aminocarbonyl wherein the amino group is optionally substituted by (C_{1-4}) alkoxycarbonyl, (C_{1-4}) alkylcarbonyl, (C_{2-4}) alkenyloxy, (C_{2-4}) alkenylcarbonyl, (C_{1-4}) alkyl or (C_{2-4}) alkenyl and optionally further substituted by (C_{1-4}) alkyl or (C_{2-4}) alkenyl;

each x is independently 0, 1 or 2;

U is CO, SO_2 or CH_2 ; or

R^4 is a group $-X^{1a}-X^{2a}-X^{3a}-X^{4a}-$ in which:

X^{1a} is CH_2 , CO or SO_2 ;

X^{2a} is $CR^{14a}R^{15a}$;
 X^{3a} is NR^{13a} , O, S, SO_2 or $CR^{14a}R^{15a}$, wherein:
each of R^{14a} and R^{15a} is independently selected from the groups listed above for R^{14} and R^{15} , provided that R^{14a} and R^{15a} on the same carbon atom are not both selected from optionally substituted hydroxy and optionally substituted amino; or
—— R^{14a} and R^{15a} together represent oxo;
—— R^{13a} is hydrogen; trifluoromethyl; (C₁₋₆)alkyl; (C₂₋₆)alkenyl; (C₁₋₆)alkoxycarbonyl; (C₁₋₆)alkylcarbonyl; or aminocarbonyl wherein the amino group is optionally substituted by (C₁₋₆)alkoxycarbonyl, (C₁₋₆)alkylcarbonyl, (C₂₋₆)alkenylloxycarbonyl, (C₂₋₆)alkenylcarbonyl, (C₁₋₆)alkyl or (C₂₋₆)alkenyl and optionally further substituted by (C₁₋₆)alkyl or (C₂₋₆)alkenyl; or
—— two R^{14a} groups or an R^{13a} and an R^{14a} group on adjacent atoms together represent a bond and the remaining R^{13a} , R^{14a} and R^{15a} groups are as above defined; or
—— two R^{14a} groups and two R^{15a} groups on adjacent atoms together represent bonds such that X^{2a} and X^{3a} is triple bonded;
—— X^{4a} is phenyl or C or N linked monocyclic aromatic 5- or 6-membered heterocycle containing up to four heteroatoms selected from O, S and N and: optionally C-substituted by up to three groups selected from (C₁₋₄)alkylthio; halo; carboxy(C₁₋₄)alkyl; halo(C₁₋₄)alkoxy; halo(C₁₋₄)alkyl; (C₁₋₄)alkyl; (C₂₋₄)alkenyl; (C₁₋₄)alkoxycarbonyl; formyl; (C₁₋₄)alkylcarbonyl; (C₂₋₄)alkenylloxycarbonyl; (C₂₋₄)alkenylcarbonyl; (C₁₋₄)alkylcarbonyloxy; (C₁₋₄)alkoxycarbonyl(C₁₋₄)alkyl; hydroxy; hydroxy(C₁₋₄)alkyl; mercapto(C₁₋₄)alkyl; (C₁₋₄)alkoxy; nitro; cyano; carboxy; amino or aminocarbonyl optionally substituted as for corresponding substituents in R^3 ; (C₁₋₄)alkylsulphonyl; (C₂₋₄)alkenylsulphonyl; or aminosulphonyl wherein the amino group is optionally substituted by (C₁₋₄)alkyl or (C₂₋₄)alkenyl; aryl, aryl(C₁₋₄)alkyl or aryl(C₁₋₄)alkoxy; and
optionally N-substituted by trifluoromethyl; (C₁₋₄)alkyl optionally substituted by hydroxy, (C₁₋₆)alkoxy, (C₁₋₆)alkylthio, halo or trifluoromethyl; (C₂₋₄)alkenyl; aryl; aryl(C₁₋₄)alkyl; (C₁₋₄)alkoxycarbonyl; (C₁₋₄)alkylcarbonyl; formyl; (C₁₋₆)alkylsulphonyl; or aminocarbonyl wherein the amino group is optionally substituted by (C₁₋₄)alkoxycarbonyl, (C₁₋₄)alkylcarbonyl, (C₂₋₄)alkenylloxycarbonyl, (C₂₋₄)alkenylcarbonyl, (C₁₋₄)alkyl or (C₂₋₄)alkenyl and optionally further substituted by (C₁₋₄)alkyl or (C₂₋₄)alkenyl;

n is 0 or 1 and AB is $NR^{11}CO$, $CONR^{11}$, $CO-CR^8R^9$, CR^6R^7-CO , $O-CR^8R^9$, CR^6R^7-O , $NHR^{11}-CR^8R^9$, $CR^6R^7-NHR^{11}$, $NR^{11}SO_2$, $CR^6R^7-SO_2$ or $CR^6R^7-CR^8R^9$,
provided that when R^V and R^W are a bond and $n=0$, B is not NR^{11} , O or SO_2 ,
or n is 0 and AB is $NH-CO-NH$ or $NH-CO-O$ and R^V/R^W are not a bond;
or n is 0 and AB is $CR^6R^7SO_2NR^2$, $CR^6R^7CONR^2$ or $CR^6R^7CH_2NR^2$ and R^V/R^W are not a bond;

provided that R^6 and R^7 , and R^8 and R^9 are not both optionally substituted hydroxy or amino; and wherein:

each of R^6 , R^7 , R^8 and R^9 is independently selected from: H; (C₁₋₆)alkoxy; (C₁₋₆)alkylthio; halo; trifluoromethyl; azido; (C₁₋₆)alkyl; (C₂₋₆)alkenyl; (C₁₋₆)alkoxycarbonyl; (C₁₋₆)alkylcarbonyl; (C₂₋₆)alkenyloxycarbonyl; (C₂₋₆)alkenylcarbonyl; hydroxy, amino or aminocarbonyl optionally substituted as for corresponding substituents in R^3 ; (C₁₋₆)alkylsulphonyl; (C₂₋₆)alkenylsulphonyl; or (C₁₋₆)aminosulphonyl wherein the amino group is optionally substituted by (C₁₋₆)alkyl or (C₂₋₆)alkenyl; or R^6 and R^8 together represent a bond and R^7 and R^9 are as above defined;

and each R^{11} is independently H; trifluoromethyl; (C₁₋₆)alkyl; (C₂₋₆)alkenyl; (C₁₋₆)alkoxycarbonyl; (C₁₋₆)alkylcarbonyl; or aminocarbonyl wherein the amino group is optionally substituted by (C₁₋₆)alkoxycarbonyl, (C₁₋₆)alkylcarbonyl, (C₂₋₆)alkenyloxycarbonyl, (C₂₋₆)alkenylcarbonyl, (C₁₋₆)alkyl or (C₂₋₆)alkenyl and optionally further substituted by (C₁₋₆)alkyl or (C₂₋₆)alkenyl;

or where one of R^3 and R^6 , R^7 , R^8 or R^9 contains a carboxy group and the other contains a hydroxy or amino group they may together form a cyclic ester or amide linkage or where R^3 contains a carboxy group and A or B is NH they may be condensed to form a cyclic amide.

17. (Previously presented) A compound according to claim 16 wherein R^A is optionally substituted isoquinolin-5-yl, quinolin-8-yl, thieno[3,2-b]pyridin-7-yl, 2,3-dihydro-[1,4]dioxino[2,3-b]pyridin-8-yl, quinoxalin-5-yl, isoquinolin-8-yl, [1,6]-naphthyridin-4-yl, 1,2,3,4-tetrahydroquinoxalin-5-yl or 1,2-dihydroisoquinoline-8-yl.

18. (Previously presented) A compound according to claim 16 wherein R^1 is hydrogen, methoxy, methyl, cyano or halogen and R^{1a} is H.

19. (Previously presented) A compound according to claim 16 wherein R^2 is hydrogen.

20. (Previously presented) A compound according to claim 16 wherein R^3 is hydrogen, fluoro or hydroxy substituted in the 1-or 3-position.

21. (Previously presented) A compound according to claim 16 wherein n is 0 and either A and B are both CH₂, A is CHOH or CH₂ and B is CH₂ or A is NH and B is CO.

22. Canceled.

23. (Currently amended) A compound according to claim 16 wherein R⁵₂ is selected from: 3-
exo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-yl
3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-yl
7-chloro-3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-yl
7-fluoro-3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-yl
2,3-dihydro-[1,4]dioxino[2,3-c]pyridin-7-yl.

24. (Currently amended) A compound selected from:

1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-
cyclohexanecarboxylic acid thieno[3,2-b]pyridin-7-ylamide
1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-
cyclohexanecarboxylic acid (2,3-dihydro-[1,4]dioxino[2,3-b]pyridin-8-yl)-amide
trans-4-[(3-Oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-
cyclohexanecarboxylic acid quinolin-4-ylamide
trans-4-[(3-Oxo-3,4-dihydro-2H-benzo[1,4]thiazin-6-ylmethyl)-amino]-cyclohexanecarboxylic
acid isoquinolin-5-ylamide
1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-
cyclohexanecarboxylic acid (2-methoxy-quinolin-8-yl)-amide
4-[(3,4-Dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-1-hydroxy-
cyclohexanecarboxylic acid (2-methoxy-quinolin-8-yl)-amide
6-[(4-Hydroxy-4-[2-(2-methoxy-quinolin-8-yl)-ethyl]-cyclohexylamino)-methyl]-4H-pyrido[3,2-
b][1,4]oxazin-3-one
6-[(4-Hydroxy-4-[2-(2-methoxy-quinolin-8-yl)-ethyl]-cyclohexylamino)-methyl]-4H-pyrido[3,2-
b][1,4]thiazin-3-one
(1R,3S,4R)-3-Hydroxy-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-ylmethyl)-amino]-
cyclohexanecarboxylic acid (2-cyano-quinolin-8-yl)-amide 1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-
pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-cyclohexanecarboxylic acid (2-cyano-quinolin-8-
yl)-amide 1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-ylmethyl)-amino]-
cyclohexanecarboxylic acid (2-cyano-quinolin-8-yl)-amide (1S,3R,4S)-3-Hydroxy-4-[(3-oxo-3,4-
dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-cyclohexanecarboxylic acid (2-cyano-
quinolin-8-yl)-amide

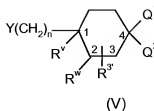
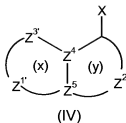
(1S,3R,4S)-3-Hydroxy-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-ylmethyl)-amino]-cyclohexanecarboxylic acid (2-cyano-quinolin-8-yl)-amide
 (1R,3R,4R)-3-Hydroxy-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-cyclohexanecarboxylic acid (2-cyano-quinolin-8-yl)-amide
 (1R,3R,4R)-3-Hydroxy-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-cyclohexanecarboxylic acid (2-cyano-quinolin-8-yl)-amide
 (1R,3S,4R)-3-Hydroxy-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-cyclohexanecarboxylic acid (2-cyano-quinolin-8-yl)-amide
 1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-ylmethyl)-amino]-r-cyclohexanecarboxylic acid (2-methoxy-quinolin-8-yl)-amide
 1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-ylmethyl)-amino]-r-cyclohexanecarboxylic acid (2-methyl-quinolin-8-yl)-amide
 1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-r-cyclohexanecarboxylic acid (2-methyl-quinolin-8-yl)-amide
 (1R,3R,4R)-3-Hydroxy-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-cyclohexanecarboxylic acid (2-methoxy-quinolin-8-yl)-amide
 7-[(r-4-Hydroxy-4-[2-(2-methoxy-quinolin-8-yl)-ethyl]-c-cyclohexylamino)-methyl]-1H-pyrido[2,3-b][1,4]thiazin-2-one
 1-Hydroxy-t-4-[(2-oxo-2,3-dihydro-1H-pyrido[3,4-b][1,4]oxazin-7-ylmethyl)-amino]-r-cyclohexanecarboxylic acid (2-methyl-quinolin-8-yl)-amide
 t-4-[(7-Fluoro-3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-1-hydroxy-r-cyclohexanecarboxylic acid (2-methoxy-quinolin-8-yl)-amide
 t-4-[(7-Chloro-3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-1-hydroxy-r-cyclohexanecarboxylic acid (2-methoxy-quinolin-8-yl)-amide
 1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-r-cyclohexanecarboxylic acid (3-methyl-quinoxalin-5-yl)-amide
 1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-r-cyclohexanecarboxylic acid (2-methyl-1-oxo-1,2-dihydro-isoquinolin-8-yl)-amide
 1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-r-cyclohexanecarboxylic acid (1-methoxy-isoquinolin-8-yl)-amide
 1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-r-cyclohexanecarboxylic acid (5-methoxy-quinolin-4-yl)-amide
 1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-ylmethyl)-amino]-r-cyclohexanecarboxylic acid [1,6]naphthyridin-4-ylamide
 1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-r-cyclohexanecarboxylic acid (2-methyl-quinoxalin-5-yl)-amide

(1R,3S,4R)-3-Fluoro-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-ylmethyl)-amino]-cyclohexanecarboxylic acid (6-methoxy-[1,5]naphthyridin-4-yl)-amide
(1R,3S,4R)-3-Fluoro-4-[(7-fluoro-3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-cyclohexanecarboxylic acid (6-methoxy-[1,5]naphthyridin-4-yl)-amide
1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-ylmethyl)-amino]-c-cyclohexanecarboxylic acid (3-methyl-1,2,3,4-tetrahydro-quinoxalin-5-yl)-amide
1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-r-cyclohexanecarboxylic acid (3-methoxy-quinoxalin-5-yl)-amide
t-4-[(2,3-Dihydro-[1,4]dioxino[2,3-c]pyridin-7-ylmethyl)-amino]-1-hydroxy-c-cyclohexanecarboxylic acid (2-methyl-quinolin-8-yl)-amide; t-4-[(2,3-Dihydro-[1,4]dioxino[2,3-c]pyridin-7-ylmethyl)-amino]-cyclohexanecarboxylic acid (2-methyl-quinolin-8-yl)-amide; (1R,3S,4R)-4-[(2,3-Dihydro-[1,4]dioxino[2,3-c]pyridin-7-ylmethyl)-amino]-3-hydroxy-cyclohexanecarboxylic acid (2-cyano-quinolin-8-yl)-amide; t-4-[(2,3-Dihydro-[1,4]dioxino[2,3-c]pyridin-7-ylmethyl)-amino]-1-hydroxy-r-cyclohexanecarboxylic acid (2-cyano-quinolin-8-yl)-amide; (1R,3R,4R)-4-[(2,3-Dihydro-[1,4]dioxino[2,3-c]pyridin-7-ylmethyl)-amino]-3-methoxy-cyclohexanecarboxylic acid (2-methyl-quinolin-8-yl)-amide; 1-Hydroxy-t-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-ylmethyl)-amino]-r-cyclohexanecarboxylic acid (6-cyano-quinolin-4-yl)-amide
t-4-[(2,3-Dihydro-[1,4]dioxino[2,3-c]pyridin-7-ylmethyl)-amino]-1-hydroxy-r-cyclohexanecarboxylic acid (3-methoxy-quinoxalin-5-yl)-amide; and t-4-[(2,3-Dihydro[1,4]dioxino[2,3-c]pyridin-7-ylmethyl)amino]-1-hydroxy-N-(3-methyl-5-quinoxaliny)-r-cyclohexanecarboxamide;
or a pharmaceutically acceptable ~~derivative~~ salt and/or N-oxide thereof.

25. (Currently amended) A method of treatment of bacterial infections in mammals, ~~particularly in man~~, which method comprises the administration to a mammal in need of such treatment an effective amount of a compound according to claim 16.

26. (Previously presented) A pharmaceutical composition comprising a compound according to claim 16, and a pharmaceutically acceptable carrier.

27. (Currently amended) A process for preparing a compound according to claim 16, which process comprises reacting a compound of formula (IV) with a compound of formula (V):



wherein n is as defined in formula (I); Z^{1'}, Z^{2'}, Z^{3'}R^{1'} and R^{3'} are Z¹, Z², Z³, R¹ and R³ as defined in formula (I) or groups convertible thereto; Z⁴, Z⁵, R^V and R^W are as defined in formula (I);

Q¹ is NR^{2'}R^{4'} or a group convertible thereto wherein R^{2'} and R^{4'} are R² and R⁴ as defined in formula (I) or groups convertible thereto and Q² is H or R^{3'} or Q¹ and Q² together form an optionally protected oxo group;

and X and Y may be the following combinations:

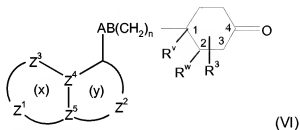
- (i) one of X and Y is CO₂R^Y and the other is CH₂CO₂R^X;
- (ii) X is CHR⁶R⁷ and Y is C(=O)R⁹;
- (iii) X is CR⁷=PR^Z₃ and Y is C(=O)R⁹;
- (iv) X is C(=O)R⁷ and Y is CR⁹=PR^Z₃;
- (v) one of Y and X is COW and the other is NHR^{11'}, NCO or NR^{11'}COW;
- (vi) X is NHR^{11'} and Y is C(=O)R⁸ or X is C(=O)R⁶ and Y is NHR^{11'};
- (vii) X is NHR^{11'} and Y is CR⁸R⁹W;
- (viii) X is W or OH and Y is CH₂OH;
- (ix) X is NHR^{11'} and Y is SO₂W;
- (x) one of X and Y is (CH₂)_p-W and the other is (CH₂)_qNHR^{11'}, (CH₂)_qOH, (CH₂)_qSH or (CH₂)_qSCOR^X where p+q=1;
- (xi) one of X and Y is OH and the other is -CH=N₂;
- (xii) X is NCO and Y is OH or NH₂;
- (xiii) X is CR⁶R⁷SO₂W, A'COW, CR⁶=CH₂ or oxirane and Y is NHR^{2'};
- (xiv) X is W and Y is CONHR¹¹ or OCONH₂
- (xv) X is W and Y is -C=CH followed by hydrogenation of the intermediate -C=C- group;

in which W is a leaving group, e.g. halo, methanesulfonyloxy, trifluoromethanesulfonyloxy or imidazoly; R^X and R^Y are (C₁₋₆)alkyl; R^Z is aryl or (C₁₋₆)alkyl; A' and NR^{11'} are A and NR¹¹ as defined in formula (I), or groups convertible thereto; and oxirane is:



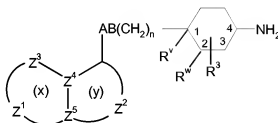
wherein R^6 , R^8 and R^9 are as defined in formula (I);
and thereafter optionally or as necessary converting Q^1 and Q^2 to NR^2R^4 ; converting A , Z^1 , Z^2 , Z^3 , R^1 , R^2 , R^3 , R^4 and NR^{11} to A , Z^1 , Z^2 , Z^3 , R^1 , R^2 , R^3 , R^4 and NR^{11} ; converting A-B to other A-B, interconverting R^v , R^w , R^1 , R^2 , R^3 and/or R^4 , and/or forming a pharmaceutically acceptable derivative salt and/or N-oxide thereof.

28. (Previously presented) A compound of formula (VI):



wherein the variables are as described for formula (I).

29. (Previously presented) A compound of formula (VII):



wherein the variables are as described for formula (I).

30. (New) A method of treatment of bacterial infections in mammals, which method comprises the administration to a mammal in need of such treatment an effective amount of a compound according to claim 24.

31. (New) A pharmaceutical composition comprising a compound according to claim 24, and a pharmaceutically acceptable carrier.